

Chapter 16

Financing Project Development

Introduction

This chapter deals with financing the development of income-producing real estate projects such as apartment complexes, office buildings, warehouses, and shopping centers. Developers of such projects face changing conditions in the national and local economies, competitive pressures from other developments, and changes in locational preferences of tenants, all of which influence the long-run profitability of developing and operating an income-producing property. Together, they affect the ability of the developer to acquire land, build improvements, lease space to tenants, and earn sufficient revenues to cover operating expenses.

Overview: The Planning and Permitting Process

Although this is not a textbook dealing with land planning, certain concepts and “terms of art” are important to understand when investing in a project development. By *project development*, we refer to the process of financing the acquisition of a tract of land with the intent of constructing a building, leasing, managing, and the possible sale of the completed project. As a part of financing the acquisition of the land and estimating the nature and extent of development, certain regulatory terms and processes must be understood as these may affect (1) the size and the cost of the proposed development, (2) the price that an investor may pay to acquire the land, and (3) the price that a project may bring when it is sold. To introduce the reader to some of the basic development terms, we have provided Concept Box 16.1. At the top of the box is a very brief checklist of major concepts that are considered first when evaluating a tract of land for project development. These terms and selected others are then defined in the lower section of the box.

Permitting

The permitting process usually begins with an application that identifies the site, its location, and a preliminary design of the improvements to be constructed. This application is then used by public officials to verify compliance with its current zoning classification. If it complies, the permit is granted and the construction of the project may commence subject to building codes and inspections. If the permit is denied, the applicant will usually

The items in this checklist are usually the first items reviewed by a developer when evaluating a site for possible development.

1. Allowable uses per zoning classification.
2. Maximum floor-to-area ratio (FAR) allowed by zoning.
3. Building bulk/density limits.
4. Setback/building line.
5. Building height limits.
6. Building footprint/envelope.
7. Parking ratios.
8. Circulation/road widths/other safety requirements.
9. Ingress/egress requirements.
10. Preliminary site plan

IMPORTANT TERMS/PROJECT DEVELOPMENT

Setback/building line—requirement to construct building a specified number of feet (setback) from the right-of-way line or other landmark. This is to ensure conformity with adjacent buildings and/or provide clear visibility for pedestrians and/or motorists.

Right-of-way line—area designated for a public street or alley that is dedicated for traffic, public use, utilities, and so on. Public entities own this area and the general public has a right to use it. As a result, no improvements are generally allowed to be constructed on rights-of-way.

Building-related terms:

Footprint—generally includes: (1) the area within the perimeter of a slab, wall of a structure, and (2) all extensions such as decks, patios, and so on. It is the shape or outline of the primary building slab and other features that may be extensions/additions that are usually adjacent to, but part of, the design for the primary structure.

Envelope—usually the perimeter of the structure to be constructed on a site. The area/environment (HVAC /lighting, etc.) within the envelope will be part of the project design. Areas outside of the envelope, or perimeter, will not include such environmental features.

Facade—the face, or exterior, of a building. Usually includes the main entrance and adjacent surface areas of a building that may be different in design and or construction from the remainder of the structure. Design approval of facades may be required as a part of the preservation of a historically important building or neighborhoods because of unique architecture, and so on.

Bulk—the three-dimensional space of a building within which length, height, and width are illustrated on the footprint. Usually, a number of possible structures/elevations/shapes are viewed in totality relative to the land area upon which the building improvements will be constructed. This is done to determine the extent of land use intensity as well as aesthetics and conformity with existing or anticipated adjacent improvements. This is then evaluated by planners relative to other structures in the area to assess conformity with zoning and building codes, safety, the potential impact on congestion, noise, and so on.

Building codes—regulations regarding required materials and methods used to construct improvements within a jurisdiction. Adherence to these codes is enforced by inspections before a certificate of occupancy (CO) is issued.

Permit—document executed by the director of planning authorizing the construction, restoration, alteration, repair, and so on of a structure and acknowledging that it conforms to requirements under the applicable zoning ordinance.

Floor-to-area ratio (FAR)—one of the more important tools used by city planners to control size and activity (use) desired within a geographic area. It is usually calculated as gross building area divided by square footage of land area. For example, an FAR of 3- to -1 would provide that for one acre of land (43,560 sq.ft.) a structure with a maximum gross building area of 130,680 sq.ft. may be developed $3 \times 43,560 = 130,680$. Obviously, the greater the FAR allowed for a site, the larger the project that may be constructed on that site, and vice versa. However, depending on market conditions including expected rents, competition, expenses, and so on, developers may find that it is only feasible to build less than the FAR allowed. FAR indicates the maximum allowable amount of space that may be developed according to the zoning classification. It is possible that market conditions may support less than that maximum amount.

Height restrictions—used to limit the vertical height of a structure to be constructed. Usually imposed by a zoning ordinance; however, height is also subject to FAA aircraft approach/landing requirements and FCC communication tower regulations. Suburban locations usually have lower restrictions than central business districts (CBDs), which usually allow both greater heights and FARs.

Allowable use—user activities permitted in a zoning classification, such as florist, travel agency, insurance agency, and so on. Usually based on SIC code classifications.

Impact fees—charged by public entities to cover added public sector expenses expected to be caused by a development, such as added traffic control, transportation issues, drainage, and so on.

Incentive zoning—used by city planners to accomplish community goals simultaneously with private sector development. Examples include the public sector granting a developer additional FAR, height, density, and so on, if a development includes multifamily housing or a public park.

Inclusionary zoning—that part of a zoning ordinance that *requires* that a specified type of development be included in order to obtain a permit for that site. An example would be the requirement that low-income housing units be included in a multifamily housing development in order for a permit to be granted.

Minimum lot size—per zoning classification. Examples might include light industrial (usually no minimum), medium industrial (5 acres), heavy industrial (10 acres), single-family residential (1/4 acre per lots), and multifamily (20 units to the acre, that is, 240 units requires 12 acres). This is used to assure less density and some separation of structures being constructed in large-scale developments.

Parking ratio—required number of parking spaces per square feet of gross building space or per number of apartment units. (e.g., one parking space per 250 sq.ft. of office space, or 1.5 spaces per apartment unit). Different ratios may apply to underground or elevated parking garages, surface parking, and shared parking (day-night) with other structures.

Site plans—drawing done to scale depicting the placement relative to right-of-way lines and setbacks of structures, circulation, parking, buffers, major landscaping, and so on, on a site.

Elevations/renderings—may first be conceptual or preliminary, then working, then final drawings of the improvements (buildings, etc.) to be constructed on a site. Will usually accompany the site plan as a part of presentation materials used for permitting, zoning, and financings.

Traffic counts—number of vehicle trips per hour past a specific site. Studies may be performed to ascertain the current traffic volume and the likely increase to be caused by a development. This study may be required as a part of an application for a permit, rezoning, or assessing impact fees by public entities.

Encroachment—occurs when the construction of improvements extends over a property line on to an adjacent property.

Property tax abatements—forgiveness of taxes for a specified number of years, which is used by city economic development planners to attract development to certain locations. Examples could include property tax reductions for a hotel if constructed near a public convention center, sports facility, and so on.

Tax increment financing (TIF)—financing obtained for development of infrastructure and other public improvements usually adjacent to and required for a successful private development. Financing is based on added property value creation and dedication of future property taxes on the increase in value collected to repay the debt.

Special sales tax districts—special sales tax imposed on retail activities in an area that is dedicated to be used to finance public improvements/streets, and so on, in that area, or dedicated to pay interest on public bonds issued to construct facilities in the affected district.

Land-to-value ratio—calculated as dollar value of land to total project value (including land) anticipated upon completion of project. Used as a benchmark to evaluate whether the ratio of land acquisition price relative to total project value is comparable to that of other projects in the market.

Buffer/berm—construction of landscape/slope required to shield or block access, view, or noise from an adjacent property that may have a very different and/or nonconforming use.

Density transfer or transfer of development rights (TDR)—allowed in some jurisdictions, whereby one property owner can sell/transfer to another all or part of the development rights for his property, including allowable building height, density, and FAR, allowed under current zoning. This enables the acquiring entity more height and/or density for its development than what would otherwise be possible.

Mixed use development—usually a combination of office, retail, and/or hotel in a project; may also include recreation, sports facilities, and so on.

Inverse condemnation—results of a development that affect the value of nearby/ adjoining land uses. Examples: building an airport, dam, power station, and so on in an area that affects property values to a greater/lesser degree but may or may not require condemnation of the entire area via eminent domain.

Cumulative zoning—used in many jurisdictions to automatically allow lower density development than the maximum allowed under current zoning. For example, the most dense, noisy, and so on land use is usually heavy industrial zoning. Under cumulative zoning, land owners in an area zoned heavy industrial may develop lower density, less intrusive buildings, such as distribution centers, warehouses, and so on, within the heavy industrial classification. Other examples would allow single-family units (lower density) to be built within a multifamily zoning classification (higher density). However, more intrusive uses are not allowed in a less intrusive zoning classification (e.g., no multifamily development within an area zoned for a single family).

Stacking plan—a floor-by-floor template or layout used to diagram how much space will be available for lease per floor in a building and to track the location and quantity of space currently leased to tenants.

Circulation—minimum size of road widths, turnarounds needed to satisfy safety, fire, security requirements, and so on.

Ingress/egress—number of entry and exits into and out of site; capital requirements for off-site improvements.

clarify or amend the application and will ask the city planning staff/director to review it again. If denied again, the applicant usually has the right to a hearing before a subcommittee (zoning and planning) of the city council. A staff recommendation is usually made by the city planning department to this subcommittee regarding the application. It should be

stressed that at each step in the process, the planning staff and the applicant engage in a series of negotiations (communications) in which problem areas of the proposed development are discussed. Modifications are usually offered by the applicant. However, if this process fails, a series of appeals and/or reapplication is made by the developer. If the application continues to be denied, the applicant usually has the right to a hearing before the entire city council. The city council will usually vote to do the following: (1) approve the application, (2) deny and remand the application back to the planning staff, or (3) deny the application with prejudice (meaning that the specific application in question cannot be resubmitted by the developer again for approval).

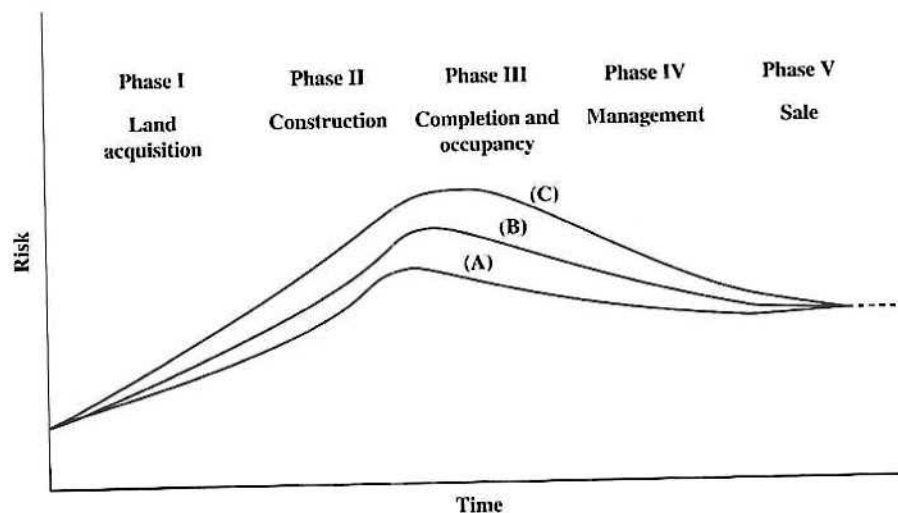
The Development of Income-Producing Property

As pointed out in the introduction, many types of income property may be developed, and each has its own special set of characteristics. Differences in market demand affect the economic feasibility of each of them. However, a few general concepts are common to all project developments.

Exhibit 16-1 shows a conceptual illustration of the development process. With the possible exception of the management phase, this process is generally applicable to most categories of project development. Essentially, a developer (1) acquires a site, (2) develops the site by constructing infrastructure, then building improvements, (3) provides the finish-out and readies the space for occupancy by tenants, (4) manages the property after completion, and (5) may eventually sell the project. How long after development the developer sells the project depends on the business strategy employed. The project has been an economic success if its market value exceeds the sum total of the land and development/construction costs expended to complete it. It is in this sense that developers are said to "create value". That is, by combining land and building improvements, in any way that is highly valued by rent-paying tenants, the developer creates value in excess of the sum of the cost of individual components.

Developers' business strategies can be categorized in three general ways. First, many development firms undertake projects with the intention of owning and managing them

EXHIBIT 16-1
Phases of Real Estate
Project Development
and Risk



- (A) Greater than normal predevelopment leasing, completion ahead of schedule.
- (B) Normal predevelopment leasing, completion on schedule.
- (C) Lower than normal predevelopment leasing, completion behind schedule.

for many years after completion. These developers view leasing and management as integral parts of their business in addition to the development function. Second, some developers expect to sell their developments after the lease-up phase, or when normal occupancy has been achieved. These developers usually sell projects to institutional investors such as insurance companies, pension funds or other investment entities. In these cases, even though they sell the project, development companies may continue to manage the project for the new owner for a fee. It also may retain a minority ownership interest. Third, some developers, particularly those involved in a combination of land development and the development of commercial property such as business parks and industrial parks, normally develop land and buildings for lease in a master-planned development. These developments may take a number of years to complete. Developers may build some properties on a speculative basis and also will build to suit facilities for single tenants.

The point is, that many developers intentionally *specialize* their business activities in one or more phases of the generalized diagram shown in Exhibit 16-1. Those developers intending to sell soon after lease-up rely heavily on external contractors, architects, real estate brokers, leasing agents, and property managers to accomplish much of phases II through V. Alternatively, very large, integrated development firms with activities in many regional markets find it profitable to provide many of the functions shown in the exhibit themselves, using external firms only when it is cost-effective to do so. For firms on both ends of the spectrum, however, it is possible that an unanticipated sale of a project may occur in any phase of development. Most developers are never averse to considering a serious offer to purchase a project at any time.

Market Risks and Project Feasibility

Exhibit 16-1 also depicts a typical risk scenario in a normal market, as represented by case (B), or one in which market rents are believed to be sufficient to justify development (a subject that we will elaborate upon later in the chapter). Risk begins with land acquisition and increases steadily as construction commences until expected cash flows from the leasing phase materialize. After lease-up is completed, occupancy takes place and the property management phase begins. At that point, project risk declines because tenants are committed to leases with terms of varying lengths. Assuming that the property is performing well, it is during phase IV that normal occupancy is achieved. At this point, the property may be described as *stabilized*. An example of a market scenario with less risk is shown as case (A), where market demand for space is increasing and predevelopment leasing, or lease commitments *prior* to project completion, is occurring at an above normal rate, thereby increasing expected cash inflows. The expected increase in cash inflows usually reflects a greater-than-anticipated demand for the type of space being developed and therefore a reduction in project risk. Obviously, if market demand and expected revenues were to decline or if the time required for the leasing phase were to be lengthened considerably, as in case (C), project risk would increase dramatically. Factors such as construction delays, price increases in materials, and interest rate increases cause changes in project risk.

Although regional and urban economics and employment are not the focus of this book, it should be clear that factors determining the demand for the type of space (e.g., office, retail, warehouse) being developed are critical to project risk. These factors may manifest themselves in current market indicators, such as vacancy rate levels, rent levels, or the extent of predevelopment leasing commitments from tenants. A very good understanding of the underlying economic base of an urban area or region is critical when assessing the viability of real estate development because not only is the demand for rental space important during development, but it is important long *after* development is completed. Demand may decline and rents may fall in markets at any time, and tenants may find more attractive

space at lower rents. Simply because a project has been developed and leased up does *not* mean that it is no longer vulnerable to competition. As space in new developments is supplied to the market, owners of existing projects become subject to the possibility of a loss in tenants. Indeed, many developers are not willing to undertake this longer-term market risk and the intensive amount of property management necessary to retain tenants. As mentioned earlier, they may prefer to sell to institutional or other investors.

To illustrate a preliminary study dealing with how a project meets preliminary market tests regarding success or failure, we provide Concept Box 16.2, which reviews a feasibility analysis for an apartment project.

Contrasted with developers who generally sell projects shortly after lease-up, larger, more geographically diversified developers may be willing to manage projects in various regions. They view this risk in the context of a portfolio in which risks emanating from longer-term economic growth and declines in individual regions can be sufficiently diversified to provide an adequate risk-adjusted return on their total property holdings. These firms may derive other benefits from continuing to perform the leasing and property management functions after development is completed. One benefit is that leads for future development opportunities may be obtained from the existing tenant base under management. These leads can take the form of (1) expansion of existing tenant facilities, (2) expansion opportunities in other cities as the businesses in which existing tenants are engaged need facilities to pursue growth opportunities elsewhere, and (3) development of different product types (e.g., the development of an office building for a satisfied tenant who currently leases warehouse space elsewhere).

Project Risks

The general market demand and leasing activity are not the only sources of risk that developers must consider in project development. Obviously, the location of the site to be acquired for the project development is an important consideration because its spatial proximity to other sites in an urban area will affect the cost of doing business for tenants or the demand for the product or service that tenants are selling. It follows that the better the spatial proximity, or location, as perceived by the tenant, the greater the value of the site. When developers acquire sites in a given market, the cost of acquisition is an important determinant of the quality and cost of building improvements. Generally, as the cost of a given site increases, the building improvements will be of higher quality and will cost more to develop. Further, as the price of the land increases, the site is likely to be more densely developed. These basic economic relationships partially explain why certain areas of cities, such as downtowns, are more densely developed with high-rise office buildings while suburban areas are less densely developed (e.g., warehouses on relatively low-cost suburban or agricultural land).

A few of the major components for which cost and quality can be differentiated include physical design, functionality in interior layout, quality of interior finish, density on the site and its adequacy of access and egress from transportation, amenities (dining, athletic, retail, etc.), landscaping, parking and circulation on the site, common areas, elevators, quality of heat, ventilation, and air conditioning (HVAC), and exterior finish (granite, aggregate, wood, etc.). Because of uncertainty about how the quantity and quality of services provided as a part of the development should be combined, or packaged, to meet demand, each of these elements presents a potential source of project risk.

Not all new projects are initially constructed as premium, or class A, space, which is usually complemented with higher-quality interior, exterior, and mechanical components. Indeed, many large national corporations seeking to expand facilities will have set policies regarding the quality of space necessary for various categories of employees. They may provide some employees involved with primary customer contacts (such as marketing)

I. Physical Feasibility:

1. *Goal:* To provide a preliminary development plan analysis to determine whether an apartment project can be built on a specific site in accordance with regulatory requirements and leased at current rental rates in order to justify land acquisition.
2. *Site:* 10 acres or 435,600 sq.ft.
3. *Asking price:* \$2,800,000
4. *Basic project description/zoning:*
 - a. Setback requirements: 15%
 - b. Circulation requirements: 15%
 - c. Maximum units per acre: 24 (based on a unit mix of 1-, 2-, and 3-bedroom apartments; weighted average = 900 sq.ft. per unit)
 - d. Parking requirements: 1.5 spaces per unit @ 400 sq.ft. per space
 - e. Open space, berms, landscape, support area: 1.0 acre (required) based on 240 units
 - f. Maximum building height: 2 stories
5. *Physical feasibility* (in square feet):

a. Gross land area	435,600
Less: Setbacks	65,340
Circulation	65,340
Open space/support/other	43,560
b. Area available for building development:	261,360
Less: Surface parking, 240 units × 1.5 spaces × 400 sq. ft.	144,000
c. Net surface area available for building	117,360
d. Proposed total footprint areas for buildings, (240 units × 900 sq.ft.) ÷ 2 stories	108,000
Excess (or deficiency) of square footage versus zoning requirements:	9,360

Conclusion: It appears that the site can accommodate a 240-unit apartment project and comply with zoning requirements.

II. Financial Feasibility:

1. Construction cost per unit: \$80,000 × 240 units	\$19,200,000
2. Asking price for land:	2,800,000
<i>Total project cost:</i>	\$22,000,000*
3. Gross revenue after lease-up and stabilization:	
Rent: \$1.10 per sq.ft. @ 900 sq.ft. @ 240 units × 12 months	\$ 2,851,200
Less:	
Average vacancy (5%)	142,560
Operating expenses (35%)	997,920
Net operating income	\$ 1,710,720
4. Return on total cost (\$1,710,720 ÷ \$22,000,000)	7.78%
5. Approximate value based on NOI:	
a. If cap rate = .078	\$22,000,000
b. If cap rate = .08	\$21,384,000
c. If cap rate = .07	\$24,439,000

- III. Conclusion: Project may be feasible if the investor/developer is willing to accept a total return on cost of 7.8%. If, upon completion, investors are pricing comparable projects at a cap rate of .08, this proposed project would not be feasible because value (\$21,384,000) is less than cost (\$22,000,000). If projects are being priced at cap rates of .07, the project would produce a sizable development profit of \$2,439,000 (or \$24,439,000 – \$22,000,000).

*Includes all infrastructure (roads, drainage, utilities, sewer costs), land, and building costs.

with relatively high-quality space; on the other hand, they may not see the need for such costly space for “back office” or support services (accounting, computer, etc.). Indeed, if the majority of the expansion space will be required for support service, not only will the corporate tenant be looking for a facility with average finish and construction quality, but also the tenant may prefer a suburban location. Proximity to a residential location for its employees may be an extremely important corporate consideration, since a support facility does not usually involve customer contact. On the other hand, buildings that are to be occupied by tenants who have frequent face-to-face contact with customers (law firms, high-fashion retail shops) generally require facilities with significantly higher finish costs.

The point is that investors must examine the demand for space in terms of the characteristics of the demand by *end users* (tenants) in a given market. This demand, in turn, depends on the type of employment in the local market and the nature of the functions that tenants will perform. Only by understanding the local economy and the nature of employment can the developer anticipate demand accurately and produce or supply the quantity and quality of space in the proper combination to satisfy market demand.

Project Development Financing—An Overview

In phase I of Exhibit 16–1, the developer may use equity or combine equity with debt financing to acquire the land, perhaps after taking an option to purchase the land (to be discussed in Chapter 17). The developer may provide the equity capital, or it may come from a partnership between the developer and the landowner or other investors. Should the developer expect to move forward on the project immediately after land acquisition, he may negotiate a loan for the cost of constructing improvements, providing equity requirements from one or a combination of the sources just described. Generally, if the loan is used to acquire the land, then to construct the building and other site improvements, it is referred to as a **land acquisition and development loan (ADL)**. Alternatively, if the developer already owns the land, it may simply be called a **construction and development loan (C&D)**. Either type of loan usually comes from a commercial bank. The loan amount is generally based on the lender's analysis of (1) the appraised value expected upon completion; (2) the **hard costs** of construction (such as materials and labor for site improvements); and (3) **soft costs**, such as architect fees, leasing costs, site planning costs and project management. It may also include some of the costs of finishing the interior space for tenants through the lease-up stage. We should also point out that lenders prefer to make loans in amounts closely related to the cost of the land and building improvements. When possible, they prefer not to finance large amounts of soft costs or off-site improvements because if the project runs into difficulty and the ADL must be foreclosed, the sale price received by the lender at that point may be lower than total project cost. This is especially true if the project must be sold prior to completion and if there have been extraordinarily high soft costs and/or significant off-site improvement costs. Such services are sometimes viewed as intangible costs and the value added to a project in difficulty may not be recognized. This is particularly true if the project design is not meeting leasing expectations and some changes must be made to the project. At this point, we would again point out that the developer will usually be personally liable for any deficiency on the balance of the note.

There are many general development strategies that may be used by developers.¹ Generally, the strategy chosen will depend on what the developer expects to do with the property after

¹ There are many possible loan structures. We focus only on commonly used forms in this chapter.

construction and leasing are completed. In most cases, developers expect to do one of the two things:

1. The property may be sold upon completion and lease-up to investors who want to own real estate but who do not want to bear the risk of development and initial leasing. In this case, the difference between the developer's cost and the price received for the completed property represents profit to the developer.
2. The developer may retain ownership with the expectation that she will continue to manage, operate, and lease the property as an integral part of her business. The developer also may choose to refinance at this time, especially if the value of the project has increased. Many developers retain management of the property in order to maintain relationships with tenants. Opportunities to develop and lease to them again may be possible if future expansion by tenants becomes a possibility.

In either case, whether the developer chooses to sell the property or refinance after the project is completed and stabilized, the ADL/C&D lender is expecting to be "taken out" or repaid. Repayment could come from sale proceeds or proceeds from refinancing with another, or perhaps even the same lender. What follows is a general depiction of the funding sequence for a development project.

Typical ADL Funding Pattern:

		Potential Sources for ADL Repayment:
Funds for Land Acquisition (if land is not already owned by developer)	_____	<ul style="list-style-type: none"> • Permanent Lender • Pre-Sale of Project • Standby Lender
Funds for Construction Cost (C & D component)	_____	

In cases where a developer expects to maintain long-term ownership of a property, a commitment for permanent debt financing may be acquired *before* a commitment for the ADL is obtained. Even in cases where developers expect to sell or refinance property when a project is completed, if leasing market conditions warrant it, the ADL lender may require the developer to: (1) obtain a permanent loan commitment or (2) obtain a standby loan commitment or (3) provide contractual evidence that the project will be sold to an identified buyer for a specified price before the maturity date of the loan. ADL lenders may require this because they realize that too much **speculative, open-ended construction lending** in a local market may result in significant overbuilding and an excess supply of space, which in turn, may result in more vacancies and a reduction in rents. Property values may then decline, resulting in foreclosures.² Should development activity in a market area increase significantly, a construction lender may want more assurance that loans will be repaid from a sale or from another lender.

Lender Requirements in Financing Project Development

When developing income properties, the process of obtaining financing may be somewhat complicated. Exhibit 16-2 should help in understanding the process of obtaining financing for development projects. As we have pointed out, financing project development may

² Many observers believe that the availability of funds is the primary determinant of development activity. Indeed, these observers believe that if funds are available, developers will build regardless of general market indications because they are so optimistic that they believe that their individual projects will always succeed in spite of the nature of competition and local market conditions.

EXHIBIT 16-2 General Submission and Closing Requirements for Project Development Loans

- A. General requirements for a loan submission package.
1. Project information.
 - a. Project description—legal description of site, survey, photographs of site, renderings of building and any parking facilities, development strategy and timing.
 - b. Site and circulation plan, identification of any easements, availability of utilities, description of adjacent land uses, soil tests.
 - c. Plans for building improvements, detailed list of amenities.
 - d. Identification of architect, general contractor, principal subcontractors; supporting financial data and past performance of parties; copies of any agreements executed among parties; description of construction and development procedures.
 2. Market and financial data.
 - a. Full set of financial statements on the borrower and any other principal project sponsors, past development experience, list of previous project lenders.
 - b. Pro forma operating statement, detail on proposed leasing terms to tenants, including base rent, escalations, expense stops, renewal options, common area expense allocation, overage (retail leases), finish-out allowances, other commitments.
 - c. Detailed cost breakdowns, including
 - Any land acquisition costs.
 - Any necessary land development costs.
 - Any required demolition costs.
 - Direct or hard costs with breakdowns for excavation, grading, foundation, masonry, steel work, drywall or plastering, HVAC, plumbing, electrical, elevator, and other mechanical items; any special finish-out or fixtures.
 - Indirect or soft costs, including architects, engineering fees, legal fees, property taxes, interest-construction period, development fees, insurance and bonding fees, estimated contingency reserve, anticipated permanent loan fees.
 - d. Any executed lease commitments or letters of intent from tenants detailing all terms of leases.
 - e. Market study and appraisal, including all comparables and detached schedule of rents charged by competitors.
 - f. Loan request, terms, anticipated interest rate, amortization period, anticipated participation options.
 - g. Equity to be provided by developer and/or other sponsors (cash and/or land); anticipated financing of draws/repayment.
 3. Government and regulatory information.
 - a. Statement as to zoning status.
 - b. Ad valorem taxes, method of payment, reappraisal dates.
 - c. All necessary permits, evidence of approved zoning variances, and so on (see list in Exhibit 17-2).
 4. Legal documentation.
 - a. Legal entity applying for loan (evidence of incorporation, partnership agreement).
 - b. Statement of land cost or contract evidencing purchase.
 - c. Detail regarding deed restrictions, and so on (see Exhibit 17-2).
 - d. Subordination agreements (see Exhibit 17-2).
 - e. Force majeure provisions (events beyond the control of the developer such as an "act of God").
- B. Additional information needed for interim loan package (if two loans are used).
1. A copy of the permanent or standby commitment from the permanent lender. Details on the amount, rate, term, fees, options relative to prepayment, calls, and participation. Details on contingencies that the developer must meet before the commitment is binding (the chapter explains these contingencies).
 2. *Detailed* architectural plans and specifications.
 3. *Detailed* cost breakdown.
 4. All data relative to requirements listed in part A and *updated* as appropriate.
- Assuming that (1) upon review of all relevant materials in A and B, the interim lender makes a commitment and (2) the developer goes forward with the project, the next step will be to close the interim loan.

EXHIBIT 16-2 General Submission and Closing Requirements for Project Development Loans (Concluded)

- C. Interim lender closing requirements.
1. Project information: *final drawings, cost estimates, site plan, and so on.*
 2. Market and financial information: statement that no adverse change in borrower's financial position has occurred since application date.
 3. Government and regulatory information: all necessary permits, notification of any approved zoning variances, and so on (also see list in Exhibit 17-2).
 4. Legal documentation.
 - a. Documentation indicating that the permanent lender has reviewed and approved all information in part A and all updates in part B.
 - b. All documentation relative to contracts for general contractors, architects, planners, subcontractors; evidence of bonding; conditional assignment of all contracts to interim lender; agreements of all contractors to perform for interim lender; verification of property tax insurance contracts, and so on (see list B in Exhibit 17-2 dealing with closing requirements in land development financing).
 - c. Inventory of all personal property that will serve as security for the interim loan (particularly important for shopping centers and hotels).
 - d. Any executed leases and approvals by permanent lender.
 - e. Copies of ground leases and verification of current payment status by the lessor/owner.
 - f. The interim lender will also insist on an assignment of all leases, rents, and other income in the event of default *and* a guarantee of loan payments by the borrower (personal liability). After review of all items indicated above, the interim lender will provide the borrower with a loan commitment detailing the terms of the loan, including amount, rate, term, fees, prepayment and call options, and any participations. However, the *permanent* lender may require certain agreements with the interim lender, including a buy-sell agreement.
- D. Permanent lender closing requirements. These requirements are necessary *if* the developer (1) completes construction and (2) satisfies all contingencies (including lease-up requirements) contained in the permanent loan commitment before the expiration date of the permanent commitment.
1. Market and financial data.
 - a. Statement of no material changes in financial status of borrower, or,
 - b. A certified list of tenants, executed leases, and estoppel certificates indicating verification of rents currently being collected, any amounts owed, and any dispute relative to payments on finish-out cost agreements with the developer.
 2. Project information.
 - a. Final appraisal of project value.
 - b. Final survey of building on site.
 3. Government and regulatory information.
 - a. Updates on currency of property taxes.
 - b. Certificate of occupancy issued by building inspector.
 - c. Other permit requirements (fire, safety, health, etc.).
 4. Legal documentation.
 - a. Delivery of the construction loan mortgage (if assigned to the permanent lender).
 - b. Architect's certificate of completion with detailed survey and final plans, and so on.
 - c. Endorsements of all casualty and hazard insurance policies indicating permanent lender as new loss payee.
 - d. Updated title insurance policy.
 - e. Updated verification on status of ground rents (if relevant).
 - f. An exculpation agreement, relieving the borrower of personal liability (if applicable).
 - g. Lien releases from general subcontractors and verification of any payments outstanding and proposed disposition.

involve one or more loans. Land acquisition and development loans (ADLs) are usually made only for the the time period during which land is acquired, building improvements are constructed and leasing is done until a stable level, or normal occupancy is achieved. The end of the estimated stabilization period represents the point at which the ADL will

be repaid. At this point, funds for repayment of the ADL should occur if the project is sold, or if funds from a permanent loan are obtained. The permanent loan is generally intended to commence after construction and after occupancy/operation of the property is said to be stabilized. At this point, the property enters a more normal, longer term phase of management, releasing, and maintenance. However for very large scale development projects, the two loans may not be entirely independent of one another. In these cases, obtaining the ADL may be dependent on the developer getting a permanent loan commitment in advance of the development phase of a project. This may be necessary because the ADL lender wants some assurance that there will be funds available to repay the development loan when stabilization is achieved and the ADL is due to be repaid. Otherwise, the development lender may have to depend on the developer to find a source of funds from the sale of the project, or refinancing with a permanent loan at that point in the future (in these cases, ADLs are referred to as being "uncovered," or speculative development loans. Many development lenders are not willing to assume that risk, because if the developer cannot find a long-term, or permanent, lender during construction, the ADL may not be repaid on schedule. We should also note that development/construction lending tends to be very specialized, as it involves more bank/lender oversight as projects are being constructed and as funds are being drawn down from the loan to construct improvements (this will be discussed later in the chapter). Consequently, the reader should become generally familiar with the documentation that is generally required by all potential lenders on development projects.³

While many of the items in section A of Exhibit 16-2 are self-explanatory, the initial submission to the lender providing the ADL will focus on what can be developed on the site; that is, it will provide a fairly detailed description of the size, design, and cost of the project. The submission will also provide a detailed market and competitive analysis, identify the team that will develop the project, and document all public approvals obtained or needed relative to zoning and permitting. Detailed pro forma operating statements and a set of financial statements from the borrower or borrowing entity will also be included. As just indicated, if the ADL requires a permanent loan commitment, the permanent lender usually gives the developer an indication of interest in financing the project. At that point, the permanent lender will request more detailed information, and the developer will be required to support the assumptions used in the pro forma operating statements from the market analysis and provide other data requested. Assuming that the developer provides data to that lender's satisfaction, a letter of *intent* to provide permanent financing is provided by the lender and the developer will usually then proceed to work on much more detailed cost breakdowns, drawings, plans, and so on. This intent to finance is usually necessary before the developer invests additional funds in more detailed planning. However, this detailed planning must be completed before the permanent lender issues a *commitment*. If the ADL lender accepts the permanent loan commitment, the ADL lender will specify how costs during development will be monitored, when loan funds will be disbursed, how construction progress will be assessed and how compliance with plans and specifications will be verified by the ADL lender.

The information in part A of Exhibit 16-2 will generally not be complete when the developer first approaches a permanent lender for funding, because in most cases, the development concept and strategy will not be finalized. Keep in mind that the submission should contain as much information as possible; however, both lenders will have specific questions and requests for supporting data that the developer must provide.

³ The information contained in Exhibit 16-2 is not meant to be an exhaustive list of required documentation and requirements for obtaining loans.

Hence, obtaining financing should be viewed as a continuing process between all of the parties that may take several rounds of review by all concerned before any written commitments are made.

Preleasing, Standbys and Presale Options

It should be kept in mind that during the development and construction period, the project will obviously not be generating any rental income. However payments for land, labor, materials, interest, and other services must be made by the developer. It is during this phase that ADL lenders view projects to be at greatest risk as funds are advanced and no income is being received. In many cases, in order to increase their chances of getting ADL approval, developers may try various avenues to help reduce project risks.

One avenue used by developers is to try to prelease space to tenants before construction. Such leases are made by developers to tenants based on development plans and renderings of the buildings. Usually, developers must make leases on very attractive terms to tenants who are making commitments sight unseen. Rent discounts, finish out allowances, moving costs, and so on may be used by developers to obtain lease commitments from prospective tenants before construction begins. Leases made by developers with creditworthy tenants at specified rents prior to construction reduces risk in the eyes of lenders.

A second possibility would be for the developer to obtain a permanent loan or "take out" commitment prior to construction. Funds from this permanent loan would be used to repay the ADL or construction lender when construction has been completed and lease up is completed. While the permanent lender makes this commitment in writing, there are many *contingencies* that the developer-borrower must meet before the permanent lender's commitment becomes legally binding. When these contingencies are met, the permanent lender will provide funds for the developer to repay, or take out the ADL/construction lender. However, if contingencies in the take-out commitment are not met, the permanent lender may not be obligated to fund the permanent loan. In this event, the developer must seek another permanent loan, or the construction lender may have to continue to carry financing on the project, or the developer may face a foreclosure proceeding when the ADL comes due. The intent of the permanent take-out commitment, then, is to create a legally binding agreement between the developer and permanent lender, whereby the permanent lender fully intends to make a long-term loan on the property after the building is completed and satisfactory levels of leasing have been accomplished. Common contingencies in permanent take outs include

- The expected date of project completion.
- Expected percentage of occupancy upon completion.
- Approval of all leases made during development by permanent lender.
- Provisions for ADL modification and/or loan extension.
- Permanent lender approval of all project design changes.
- Permanent lender approval of any substitutions or changes in materials used during construction.
- Permanent lender approval of changes in contractors providing services and materials during construction.
- Review and approval of the ADL agreement.

It must be kept in mind that the ADL lender will be monitoring construction and making funds available to the developer as the project is underway. However because the permanent lender will be providing funds to take out the ADL, the permanent lender also must monitor activity during development so that there will be assurance that the project

meets requirements and satisfies contingencies and requirements are not met, the permanent lender may not fund and the ADL may not be paid off.⁴

Another option for the developer to use in order to obtain an ADL is to negotiate a standby commitment for permanent financing from a standby lender. Standby commitments are similar to a permanent take-out loan in terms of the contingencies and other contents of the agreement. However, standbys differ from permanent take-outs in that neither the borrower nor the standby lender really *expects* the standby commitment to be used by the developer. It is usually obtained to satisfy the ADL lender. In these cases, the developer is probably expecting to sell the project when finished and repay the ADL with proceeds from the sale. However, if the developer-borrower wants to begin development, and if the construction/ADL lender wants assurance of some type of take-out funding in case the developer cannot sell when construction is completed, the developer may have to find a standby commitment before the ADL is obtained. If at the end of construction and lease up, the developer does not realize funds from the sale of the project as expected, or if some other permanent take-out cannot be found, then if a standby commitment was obtained, the developer will turn to the standby lender. Funds from the standby will be used to repay the ADL and the standby lender will, in effect, become a "bridge lender" until a permanent loan can be found. Alternatively, if a permanent lender cannot be found, or the project remains unsold, the standby lender may become the permanent lender.

Finally, in some cases, the developer may enter into a presale agreement with (a) an investor or (b) final owner/user prior to construction. In case (a), longer-term investors (e.g., pension funds, sovereign wealth funds) may not want to be involved with the risk associated with the construction/lease-up phase of projects. They prefer to purchase a property after stabilization (when it becomes a "core" property investment). These investors may be willing to execute a purchase agreement prior to construction (with many contingencies). In case (b), the development may be a "build to suit" project with the purchaser being the owner/tenant (e.g., corporate headquarters, regional office). In either (a) or (b), the ADL or construction(C&D) lender may view a presale agreement as an adequate "take out" source of funding with which developers will repay these loans.

Methods of Disbursement—Construction Lending

Generally, the construction loan is secured by a mortgage for future advances or by an open-end mortgage. The construction lender usually requires a first lien on the land and all improvements as they are constructed on the site. Construction lenders follow the cardinal rule of never advancing loan funds in excess of the costs and/or the economic value of the property that serves as security for the loan, as it is being created. In other words, the construction lender never wants the developer to get ahead of the lender by drawing down loan funds in excess of the cost of construction of improvements made to date.

The most commonly used method to disburse funds for commercial development is the **monthly draw method**. This method is used extensively in the construction of larger-scale projects requiring sizable loans. The developer requests a draw each month based on the work completed during the preceding month.⁵ An architect or engineer will usually verify that work has been performed and the lender will approve the draw and disburse

⁴ In this event, the ADL lender may have to continue to provide funding until conditions in the permanent loan commitment are met. This will usually mean that the permanent loan agreement must be modified and extended. In this event, the ADL lender may become a "permanent" lender, or foreclose. Alternatively, the developer may have to seek alternative funding at this point.

⁵ This draw pattern may also be referred to as % completion method of financing construction.

funds to the developer who will pay third-party vendors. Again, the collateral value of improvements serving as security for the loan should increase simultaneously with the disbursement of funds.

In some cases, the developer may also submit invoices to the lender through a title insurance company. These firms update the title abstract between each draw and approve payment on the invoices. As payments are made, contractors and subcontractors sign an agreement that they have been paid for work done to date.⁶ This usually precludes them from filing mechanics' liens.⁷

Interest Rates and Fees

As with many business loans, interest rates on construction loans draws are generally based on short-term interest rates that may vary considerably from period to period in response to current lending conditions. Most lenders, particularly commercial banks, usually rely on a system of floating interest rates. Floating rates may be based on the bank's prime lending rate or the short-term interest rate charged on commercial loans to the bank's most creditworthy customers. However, some short-term loans may be based on either Treasury bill rates or the London Interbank Offered Rate (LIBOR). The lender normally evaluates a construction loan as to risk during the underwriting process, and the interest rate quoted on the loan reflects the short-term rate to which the loan will be tied *plus* a risk premium that is added to that rate. For example, an interest rate on a construction loan may be quoted as "two points over LIBOR." This means that if LIBOR is 3 percent at closing, the interest rate charged on the construction loan will begin at 5 percent. Because the interest rate on construction loans is usually a floating rate, it will be calculated each month. The actual interest expense that the developer must pay can differ substantially from the amount budgeted or included in the loan request. In other words, the developer usually bears the interest rate risk during the development period. In addition to changes in LIBOR, the construction lender may also charge loan commitment fees.

Project Development Illustrated

Project Description and Project Costs

What follows is a case example of Rolling Meadows Center, a high-quality shopping center development located in an upper-income neighborhood proposed by Southfork Development Co. Southfork plans to develop, and then own and operate, Rolling Meadows for a long period of time. It has approached the Second National Bank to provide construction financing. Exhibit 16-3 contains a breakdown of site size, floor-to-area ratio, parking, and anticipated construction and costs. It also provides percentage breakdowns for building coverage, parking, and open space. The lender will review the percentage breakdowns to ascertain whether the density of the project development on the site is too high and whether parking is adequate relative to competing centers in the market area. The lender will pay particular attention to the site plan and ease of traffic circulation on the site. Citadel will have access to comparative data for this project from previous project financing files and from industry statistics.⁸

⁶ On very large-scale projects that will take an extensive period of time to finish and will involve many vendors and contractors, title companies frequently make disbursements and verify that no liens have been filed since the previous draw.

⁷ Liens created during construction can cause problems for a developer in closing the permanent loan or selling the property when it is completed.

⁸ One important source of data is the Urban Land Institute's *Dollars and Cents of Shopping Centers*.

EXHIBIT 16-3
Project Description
for Rolling Meadows
Center

A. Site and proposed improvements	
Site area (in acres)	9.5
Gross building area (GBA)	120,000 sq. ft.
Gross leasable area (GLA)	110,000 sq. ft.
Percent leasable area	91.67%
Floor-to-area ratio (site area)	3.45
Parking ratio	5 spaces/1,000 sq. ft. (GLA)
Parking spaces	550
B. Development period	12 months
C. Site plan	
Building coverage	29%
Street parking	45%
Open space/landscaping	26%
Total	100%
D. Loan information	
Construction loan	
Loan term	12 months
% of construction loan drawn in the first four months	75%
% of construction loan drawn in the last months	25%
Interest rate	12%
Construction loan fee	2%
Permanent loan	
Debt amortization	25 years
Term of loan	10 years
Interest rate	12%
Permanent loan fee	3%
E. Anticipated hold after completion	5 years

Exhibit 16-4 breaks down development costs into land acquisition costs, off-site costs, hard costs, and soft costs. These costs are also broken down as a percentage of total cost and cost per square foot of gross building area (GBA).

Depending on the type of shopping center (e.g., strip, neighborhood, specialty center, regional mall), lenders will want to know whether the relative breakdown of costs conforms to average breakdowns for recently developed neighborhood centers of comparable quality in comparable locations. Land costs or hard costs that are too high may mean that the total cost of developing an adequate mix of retail space of adequate quality may not be feasible at prevailing market rents. Similarly, common areas (difference between gross building area and gross rentable area) that are too large or too small may affect the ability to lease space and can be detrimental to profitability. The correct mix of location improvements, density, parking, circulation, and design is crucial to success.

In many cases, lenders will not fund total land acquisition costs nor base loans as a percentage of appraised value. In other words, lenders prefer to make loans to cover improvement costs, and the developer may be expected to contribute the land as equity. Further, lenders usually require a first lien on the land and all improvements made with the proceeds of the construction loan. They do so because loans based on appraised value alone may result in the lender advancing funds in excess of the market value of the property if the appraisal is in error. For example, if the lender agrees to lend 80 percent of the total project value and the appraisal (which you must realize is being done for a project that is still in the planning and design stages) results in an overestimate of value in the range of 130 percent of actual value upon completion, then the loan advances would equal 104 percent of actual value (80% of 130%). Further, if an overoptimistic assessment of future rental

EXHIBIT 16-4
Summary of Cost
Information for
Rolling Meadows
Center

	Cost	Percent of Total Cost	Cost per sq. ft. GBA
A. Land and site improvements:			
Site acquisition and closing costs	\$ 2,500,000	20.9%	\$20.83
On-/off-site improvement costs:			
Off-site improvements	\$ 250,000		
On-site improvements:			
Excavation and grading	50,000		
Sewer/water	150,000		
Paving	200,000		
Curbs/sidewalks	100,000		
Landscaping	100,000		
Total on-/off-site costs	\$ 850,000	7.1%	\$ 7.08
B. Construction costs:			
Hard costs:			
Shell structure	\$3,925,000		
HVAC	528,500		
Electrical	613,000		
Plumbing	221,580		
Project management fees	300,250		
Finish-out	1,400,600		
Graphics/signage	66,570		
Total hard costs	\$ 7,055,500	58.9%	\$58.80
Soft costs:			
Architect engineering	\$ 147,000		
Fees and permits	24,300		
Legal fees	26,900		
Construction interest	692,416		
Construction loan fees	180,028		
Permanent loan fees	270,042		
Leasing commissions	45,300		
Direct overhead	160,000		
Indirect overhead	30,800		
Total soft costs	\$ 1,576,787	13.2%	\$13.14
Total project costs	<u>\$11,982,287</u>	<u>100.0%</u>	<u>\$99.85</u>
Construction Loan Request:			
Total on-/off-site improvements	\$ 850,000		
Total hard construction costs	7,055,500		
Soft costs	403,500		
Total costs to be financed	8,309,000		
Estimated interest carry	692,416		
Total loan amount	9,001,416		
Equity requirements	2,980,871		
Total project cost	<u>\$11,982,287</u>		

achievement caused the overestimate of project value, the developer may have difficulty servicing the mortgage debt. This difficulty obviously creates problems for the developer and for the lender. Recall that the loan commitment may contain contingencies relative to leasing and rental achievement and may also contain a requirement that the final project appraised value exceed the loan commitment by a specified percentage. If these provisions

are not achieved, the lender may refuse to advance any more funds and may “call” the loan balance and demand repayment of the loan from the developer.

Many lenders also will not fund off-site improvements that are part of a loan request. This is because other parties may have title to the land on which improvements will be made. Even if the developer has title to the off-site land, the construction lender may have difficulty acquiring satisfactory lien security on the land where the off-site improvements will be made. The ability to acquire funding of off-site costs depends on the lender’s judgment as to how much in excess of the total loan amount the value of the project will be when completed.

Most lenders will fund all hard costs if they can be documented and are commensurate with the overall quality of the development. Lenders, however, vary in their willingness to fund many soft-cost items. They may not be willing to fund closing fees associated with the land acquisition, financing fees, planning and design fees, permitting fees, and/or any overhead or administrative charges the developer requests as a part of the project cost. This is because these expenses may represent fees for services or intangibles which may not be reflected in value. Especially in the event of default or bankruptcy, should a property have to be auctioned or sold to repay the construction loan. Hard costs represent outlays for tangible improvements (e.g., bricks and mortar) and are thought to be better security than outlays for intangibles. This is because even though the latter may be viewed at the time as necessary, if the project was to fail and be auctioned off, the next owner may have to incur some of these soft costs again. Finally, an estimate of construction interest carry is usually *included* in the loan request.

Construction Loan Request

Exhibit 16–4 contains a breakdown of the *loan request*. Note that this particular loan request does not include land cost. Also note that it does not ask for financing for all soft costs. However, Southfork is requesting funding for some off-site improvements. The total loan request is \$9,001,416, which represents about 75 percent of the \$11,982,287 estimate of total project cost. Also, note in Exhibit 16–4 that the request includes construction period interest as part of the loan. This is very common in construction lending because the project will usually not generate much rent or cash inflow during development. Therefore, the developer will usually be allowed to borrow the interest as one additional cost of construction. An estimate of *construction period interest* is made by estimating the *monthly draw rate* for payment of construction costs to be funded by the lender over the 12-month period. This is illustrated in Exhibit 16–5.

Note in the exhibit that the draw rates shown in column (a) are calculated by determining expected monthly draws for *direct construction costs* (\$8,309,000). Also note that the estimated interest is \$692,416. This consists of interest calculated at $12\% \div 12$ months, or 1 percent per month on the cumulative loan balance shown in column (d). Interest draws are computed on the outstanding monthly loan balance and are borrowed as a part of the construction cost draws at the end of each month. The developer makes cash interest payments (column e) to the bank each month. However, because all of the interest carry is *borrowed*, it essentially becomes part of the loan balance. Furthermore, because all monthly payments made by the developer are interest only, no reduction of principal actually occurs. In short, this pattern is analogous to an interest-only loan, discussed in previous chapters. The reader may recall that these loans require no reduction in loan principal because payments are computed to include interest payments only. Also note that in our example, the interest payments in column (d) are offset by interest draws in column (b). Thus, the net effect is as if there were no payments to the lender until the entire loan balance is repaid at the end of the construction period. This is analogous to a negative amortization loan with the loan balance increasing by the amount of interest accrued each month.

EXHIBIT 16-5 Projected Loan Repayment Schedule for Rolling Meadows Center

End of Month	Loan Draws			(d) Loan Balance	Developer Payments		
	(a) Project Costs	(b) Construction Interest	(c) Total Draws		(e) Interest	(f) Principal Reduction	(g) Ending Loan Balance
0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
1	1,557,938	0	1,557,938	1,557,938	0	0	1,557,938
2	1,557,938	15,579	1,573,517	3,131,454	15,579	0	3,131,454
3	1,557,938	31,315	1,589,253	4,720,706	31,315	0	4,720,706
4	1,557,938	47,207	1,605,145	6,325,851	47,207	0	6,325,851
5	259,656	63,259	322,905	6,648,766	63,259	0	6,648,766
6	259,656	66,488	326,144	6,974,910	66,488	0	6,974,910
7	259,656	69,749	329,405	7,304,315	69,749	0	7,304,315
8	259,656	73,043	332,699	7,637,014	73,043	0	7,637,014
9	259,656	76,370	336,026	7,973,041	76,370	0	7,973,041
10	259,656	79,730	339,386	8,312,427	79,730	0	8,312,427
11	259,656	83,124	342,780	8,655,208	83,124	0	8,655,208
12	259,656	86,552	346,208	\$9,001,416	\$86,552	\$9,001,416	\$ 0
Total	<u>\$8,309,000</u>	<u>\$692,416</u>					

In summary, Exhibit 16-5 shows that the loan balance will increase each month by the project cost draws plus interest borrowed. The total ending balance, \$9,001,416, will be equal to the total construction loan amount at the end of the 12-month period. This amount will be funded by the permanent lender, standby lender, sale of the project or other avenues discussed above, thereby "taking out" the ADL at that time.

Even though developers may estimate costs very carefully, the *actual* costs of development plus interest carry may differ from estimates. This is because of uncertainty as to the rate at which work will progress and because interest rates may change in response to market conditions. Hence, it is likely that the *actual* interest draw pattern will deviate from the *estimated* pattern. Once the \$9,001,416 commitment amount is reached, however, the construction lender *is not required to fund any more draws as the lender is not required to fund any more than the committed amount*. If the developer does not want to bear the risk of unanticipated interest rate changes and the possibility of interest cost overruns, she can eliminate, or at least reduce, that risk for a fee by purchasing an interest rate swap.

If the developer does not want to bear the cost of eliminating interest rate risk, she may have to provide additional equity at that time. This may be done by attracting more equity partners to the venture or finding a gap lender. Actual costs could exceed estimated costs because of material and labor cost overruns, unanticipated changes in interest rates,⁹ a longer-than-anticipated lease-up period because of a declining market, and so on. If this was to occur and if the developer cannot find other sources of equity (through a partnership or similar arrangement) or a gap loan, and if the interim lender refuses to extend additional funds, the developer may face foreclosure.

Lenders and developers also use a draw, interest, and repayment schedule similar to that shown in Exhibit 16-5 as a tool for financial control. They may use this schedule in conjunction with field surveys completed by staff engineers to verify that the total percentage

⁹ Some developers use interest rate futures to hedge against interest rate risk when using floating interest rate loans.

of *work in place* at the end of each month corresponds to the outstanding loan balance at the end of each month. If the lender feels that total funds drawn down are in excess of the cost of construction in place, the lender will not allow further draws until offsetting improvements have been made. Note that because the construction lender charges a 2 percent loan origination fee, the loan yield will be over 15 percent, as compared with the 12 percent rate of interest used to compute interest on the loan. This yield is calculated by finding the rate of discount that makes the present value of monthly draws provided by the lender at closing, then at the end of each month 1 through 12, less the total inflow received by the lender at the end of month 12 ($9,001,416 + 86,552$) equal to the loan fees (\$180,028) charged at closing by the construction lender (calculation not shown).

A final note regarding the draw schedule has to do with lenders' use of **holdbacks**. Generally, when project developers contract with various building contractors to perform work, developers hold back a percentage (10%) of each progress payment made to such contractors until all work is satisfactorily completed. Holding back payments assures developer control that all work has been completed in accordance with plans and specifications. When work is completed to the developer's satisfaction, the final payment is made to the contractors. Most lenders are aware of holdback practices and also will hold back a percentage (10%) of all loan draw requests from developers. Lender holdbacks prevent developers from drawing down funds at a faster rate than they must pay to contractors. Exhibit 16-5 does not take holdbacks into account. However, you should be aware of this practice and take holdbacks into account in the draw schedule if applicable.

Permanent Loan Request

Upon completion of the project, recall that the developer may replace the construction loan with **permanent financing**. In our example, we assume that the new permanent loan amount will be \$9,001,416. For a 3 percent loan fee, Citadel Life Insurance Company will provide Southfork with a 10-year mortgage. Monthly payments will be \$94,805 based on a 25-year amortization schedule at an interest rate of 12 percent. (We should add that Southfork may want to have the property appraised again at this time. Market conditions may have changed since construction began and Southfork may believe the project is worth more than the value that was estimated before development began. This could result in a permanent loan greater than \$9,001,416.)

Market Data and Tenant Mix

Exhibit 16-7 contains a breakdown of the expected tenant mix for Rolling Meadows Center and the space tenants are expected to occupy. For a neighborhood center, most lenders would expect at least one predevelopment lease commitment from a food chain and/or general merchandiser. Obviously, if favorable predevelopment lease commitments accompany the loan request, it is more likely that a commitment will be made by the lender. The other data in the exhibit are based on experience from U.S. data averages and with averages obtained from local market surveys. It should be stressed that exact comparability

EXHIBIT 16-6 Summary of Permanent Loan Terms

Total loan	\$9,001,416
Debt amortization	25
Term of loan	10
Interest rate	12.00%
Debt service/month	\$94,805
Debt service/year	\$1,137,661
3% permanent loan fee	\$270,042
Yield to permanent lender	12.55%

EXHIBIT 16-7
Market Survey
Data—Shopping
Centers (Tenant
Information)

Classification	Number of Stores	% of Tenants*	sq. ft. of GLA	% GLA	U.S. Avg. %	Local Avg. %
General merchandise	1	3.57%	4,950	4.50%	5.60%	5.20%
Food	2	7.14	37,400	34.00	30.80	36.00
Food service	1	3.57	8,800	8.00	8.80	7.00
Clothing	3	10.71	7,700	7.00	5.00	6.00
Shoes	1	3.57	1,155	1.05	1.30	0.70
Home furnishings	1	3.57	1,100	1.00	2.60	2.30
Home appliances	1	3.57	990	0.90	2.40	1.00
Building materials	1	3.57	1,320	1.20	3.40	2.00
Automotive supplies	0	0.00	0	0.00	1.70	1.50
Hobby	1	3.57	2,035	1.85	2.70	2.50
Gifts and specialty	2	7.14	2,860	2.60	2.50	2.30
Jewelry and cosmetics	1	3.57	1,650	1.50	0.70	2.00
Liquor	1	3.57	1,430	1.30	1.50	1.50
Drugs	1	3.57	9,900	9.00	8.50	8.00
Other retail	6	21.46	12,100	11.00	4.40	6.00
Personal services	2	7.14	8,910	8.10	6.50	7.00
Recreational	1	3.57	2,200	2.00	3.50	3.00
Financial	1	3.57	3,300	3.00	4.10	3.00
Offices	1	3.57	2,200	2.00	4.00	3.00
Total	28	100.00%	110,000	100.00%	100.00%	100.00%

*Rounded.

in tenant mix is not expected in each and every project submitted for review. However, past experience usually indicates that certain types of tenants are not compatible (e.g., auto parts and jewelry stores) in the same center, whereas other tenants are compatible (e.g., jewelry stores and furriers). A submission that indicates a lack of understanding regarding tenant mix may reveal developer inexperience. Further, the tenant breakdown should be realistic—if the developer projects too many high-end retail stores (which usually pay high rents), it may indicate overoptimism.

In addition to the data shown in Exhibit 16-7, the developer will have to provide more detail regarding the trade area expected to be served by the center, a competitive analysis of other centers, and proof that the addition of another center will not oversupply that market with retail space. Additional information relative to population growth, age, households, income, retail spending patterns, and so forth (not shown), in the trade area must also support the loan request. The importance of these data cannot be stressed enough.

Pro Forma Construction Costs and Cash Flow Projections

Another necessary ingredient in the submission of data to the permanent lender is a pro forma (estimate) of construction costs and net operating income. Exhibit 16-8 contains annual estimates for expenditures during the construction period for land acquisition, site improvements, hard costs, and soft costs. Total loan draws are based on the \$9,001,416 loan request (including interest), for which financing is being sought, over the two-year development period. Note that the developer will require \$2,950,071 from internal sources at closing to cover land acquisition and loan fees, plus an additional \$30,800 to cover indirect overhead, or total equity of \$2,980,871. Citadel Life Insurance Co. will review Southfork's financial statements (not shown) to determine whether it has the ability to provide such funding from internal sources.

EXHIBIT 16-8
Pro Forma Statement
of Cash Flows—
Construction Period

	Draws per Year		
	(0)	(1)	Total
Site acquisition and closing cost	\$2,500,000		\$2,500,000
Site improvements (on-/off-)		\$ 850,000	850,000
Hard costs		7,055,500	7,055,500
Soft costs		434,300	434,300
Permanent loan fee	270,042		270,042
Construction loan fee	180,028		180,028
Construction interest		692,416	692,416
Total construction cash outflow	2,950,071	9,032,216	11,982,287
Less: Total draw	0	9,001,416	9,001,416
Total equity needed	\$2,950,071	\$ 30,800	\$2,980,871

Exhibit 16-9 details the pro forma operating statement for Rolling Meadows Center. The lease-up or marketing effort should result in 70 percent occupancy during the second year and 95 percent thereafter. Southfork is estimating a base rent of \$15 per square foot of gross leasable area, with average increases based on leases indexed to the CPI of 6 percent per year after the first year of operation (leases are expected to have terms ranging from one to five years). An overage provision requires tenants to also pay 5 percent of gross sales in excess of a base sales level each month.¹⁰ In a retail operation, rent is usually divided into two components. The first is a minimum rent per square foot. The other component is called **percentage rent**. Developers and tenants may negotiate percentage rent in lease agreements when tenants are willing to trade off paying lower initial rents to developers in exchange for giving developers a percentage of their future sales revenues. These rents are calculated as a percentage of the sales of a tenant in excess of a predetermined *breakpoint* sales volume. As long as the tenant's sales are below the breakpoint, the owner receives only the minimum rent. When a tenant's sales increase above the breakpoint, the percentage rent rate is applied to the sales volume in excess of the breakpoint. An overage results, which is added to the minimum rent, thus increasing the total rent. In this way, should the shopping center become very successful, the developer/owner shares in the increased revenue produced by the tenants. Tenants benefit by paying lower base rents during their initial stages of occupancy. The percentage rent shown in Exhibit 16-9 is estimated for all tenants in Rolling Meadows.

Tenant reimbursements are also shown in Exhibit 16-9. These amounts are based on negotiations between the owner and tenants and represent the amount of operating expenses over expense stops for which the tenant is responsible (recall the discussion of such stops in Chapter 11 for office buildings). Hence, base rents, percentage rents, and expenses for which tenants are responsible over some pre-agreed amount (stop) all represent gross income to the owner of Rolling Meadows.

Operating expenses are also detailed in Exhibit 16-9. These amounts represent the actual expenses that must be paid to operate Rolling Meadows. They are deducted from rents, overage, and tenant reimbursements. As we discussed in Chapter 9, many leases include some type of pass-through or recovery for insurance, property taxes and a share of common area operating expenses and maintenance (parking lot, circulation space in center, etc.).

¹⁰Overages are common in retail leasing. The breakpoint is commonly determined by dividing the tenant's base rental amount (rate per square foot times rentable area) by the percentage rent negotiated between the owner and tenant. For further discussion, see *Shopping Center Development Handbook Series* (Washington, DC), published by the Urban Land Institute.

EXHIBIT 16-9 Pro Forma Statement of Cash Flows—Operating Period

Cash Flows (End of Year)	(2)	(3)	(4)	(5)	(6)
Income:					
Minimum rent	\$1,650,000	\$1,749,000	\$1,853,940	\$1,965,176	\$2,083,087
Overage (5% of gross sales)	30,000	124,800	129,792	134,984	140,383
Tenant reimbursements					
Real estate taxes	137,500	143,000	148,720	154,669	160,856
Common area maintenance	385,000	400,400	416,416	433,073	450,396
Utilities	367,500	382,200	397,488	413,388	429,923
Insurance	33,000	34,320	35,693	37,121	38,605
Gross potential income	\$2,603,000	\$2,833,720	\$2,982,049	\$3,138,410	\$3,303,249
Less: Vacancy allowance	780,900	141,686	149,102	156,920	165,162
Expected gross income	\$1,822,100	\$2,692,034	\$2,832,947	\$2,981,490	\$3,138,087
Expenses:					
Management and leasing fees	\$ 104,500	\$ 93,690	\$ 99,187	\$ 105,008	\$ 111,174
General and administrative	77,000	80,080	83,283	86,615	90,079
Real estate taxes	137,500	143,000	148,720	154,669	160,856
Common area maintenance	385,000	400,400	416,416	433,073	450,396
Utilities	300,300	312,312	324,804	337,797	351,309
Insurance	33,000	34,320	35,693	37,121	38,605
Other	27,500	28,600	29,744	30,934	32,171
Total expenses	\$1,064,800	\$1,092,402	\$1,137,847	\$1,185,215	\$1,234,589
Net operating income	\$757,300	\$1,599,632	\$1,695,099	\$1,796,275	\$1,903,498
Less: Debt service	1,137,661	1,137,661	1,137,661	1,137,661	1,137,661
Before-tax cash flow	\$-380,361	\$ 461,971	\$ 557,438	\$ 658,614	\$ 765,837
Ratios:					
Operating expense		40.58%	40.16%	39.75%	39.34%
Debt coverage ratio		1.41	1.49	1.58	1.67
Free and clear return		13.35%	14.15%	14.99%	15.89%
Return on equity		15.50%	18.70%	22.09%	25.69%
Vacancy-collection loss		5.00%	5.00%	5.00%	5.00%
Break-even occupancy rate		78.70%	76.31%	74.01%	71.82%

However, because some time will be required before a newly developed property achieves normal occupancy, there will likely be only a few tenants occupying far less than the total space that has been developed and available for lease. Consequently, developers usually include clauses in leases with what are referred to as *grossed up* expense reimbursements during the lease-up phase of a project. This is done because large outlays for some expenses related to the entire property must be paid by the developer during the lease up period. However, these expenses cannot be passed through in total to a small number of tenants. Examples of such outlays could include: insurance, property taxes, security costs, and so on. For example, security costs will usually be based on the total area of a property which would include all common areas, parking lots, and so on, not just on the space currently occupied during lease-up. In order to recover some of these costs from tenants who occupy only a portion of the developed space during lease up, developers usually estimate what reimbursable expenses per square foot will be when the property is fully leased (this is referred to as *grossing up expenses*). Using this estimate, they then negotiate with tenants, expense recoveries to be charged during the lease-up period. When normal occupancy is

achieved, expense recoveries can then be adjusted based on actual expenses and actual space occupied by all tenants.¹¹ Tenants will then pay their share of these expenses to Southfork as expense reimbursements. We should add that Southfork will also incur expenses of its own for administration, leasing commissions, and other expenses that will not be recoverable from tenants. Our projections assume that a sufficient number of leases will be signed at the end of the second year to warrant closing the permanent loan.

Particular attention should also be paid to the ratios that appear at the bottom of Exhibit 16-9. These ratios, calculated beginning with data for year 3 when normal operation is anticipated, are used to evaluate the performance of the property. The permanent lender will review these and other ratios to ascertain whether they fall into acceptable underwriting ranges. We must stress again that market data supporting rents and overages, proof of estimates of operating costs from the management of comparable centers, realistic estimates of the lease-up rate, and lease terms that tenants are willing to accept in the retail market are all critical to the underwriting process.

The operating expense ratio, which is calculated by dividing total annual operating expenses by the effective gross income (*EGI*), indicates that at most, 40.5 percent of *EGI* from Rolling Meadows will be used to pay operating expenses. In contrast, Rolling Meadows's debt coverage ratio, or net operating income divided by debt service, exceeds 1.41. This ratio demonstrates the property's ability to meet its debt payments. The cash returns earned on the total investment will be positive and exceed the mortgage interest rate.¹² This free and clear return is calculated by dividing the net operating income by the total project costs. Return on equity, a second cash return measurement, is calculated by dividing before-tax cash flow by the total equity contributions. These returns do not include any appreciation in project value. Finally, the break-even occupancy rate approximates the level of occupancy required to service both the debt service and the operating expenses of a project. This ratio is calculated by dividing the annual debt service and operating expenses by the gross potential income. Assuming that the vacancy and collection loss of 5 percent is primarily due to vacancy, this implies an occupancy rate of 95 percent. Clearly, with occupancy projected to be 95 percent, Rolling Meadows easily meets its debt service and operating expense obligations.

Assuming that the lender makes the commitment, the developer will incorporate the actual amount of the loan commitment into the pro forma statements at this time.¹³

¹¹ For example, assume that a property has just been developed containing 100,000 square feet of rentable area but, thus far, only 5,000 square feet has been leased. If security for the entire property will cost \$200,000 per year, all of that expense cannot be recovered from those tenants currently occupying only 5,000 sq.ft. Consequently, for those tenants who take occupancy prior to the point at which the shopping center is fully leased, or stabilized, the property owner will normally want to negotiate a "gross up" provision in leases made with those tenants. This is done by the developer based on estimates of reimbursable expenses that would be expected at full occupancy. This way, the developer will recover at least some portion of expenses that should be paid by current tenants even though the property is not yet fully leased. Then (1) as occupancy increases, (2) expenses rise, and (3) if estimates of expenses at normal occupancy as made by the developer are accurate, current tenants should pay the same now as they will pay when normal occupancy is achieved. Obviously because (1) actual expenses at full occupancy levels are unknown and (2) "grossed up" payments could be greater or less than what tenants think their share of expenses should be, gross up clauses in leases will obviously be compared in leases being offered to tenants by competing property owners.

¹² Total project cost is estimated at \$11,982,287. When this amount is divided into *NOI*, a 13.35 percent return on total investment results.

¹³ The actual loan commitment will contain contingencies that may affect the pro forma statements presented here. Recall that all of the statements produced thus far are part of a proposal to the lender. Should the lender decide to fund less than the total amount requested or insist on a higher lease-up requirement, among other things, those changes would have to be incorporated in the estimate.

Feasibility, Profitability, and Risk—Additional Issues

Most of the analysis that the interim and permanent lenders conduct focuses on the pro forma statements and market data supplied with the loan requests. This is because lenders are concerned about market conditions, rents, and the ability of the project to cover expenses and debt service. Southfork is equally concerned with these issues; however, it is also interested in knowing how well this project will perform as an investment, both before and after taxes. Also, from the standpoint of assessing risk, it needs to know how sensitive the estimates provided in the pro forma statements are to various assumptions made in the analysis. Much of what follows are analytic tools for assessing project performance. These tools may be used at any time during development as market data, building costs, interest rates, and so on, change. They also may be used to ascertain the maximum price that should be paid for the land *prior to its acquisition*. To illustrate these ideas, we will use the pro forma estimates presented thus far and change them by introducing sensitivity analysis.

Profitability before and after Taxes

For Southfork to assess the profitability of the Rolling Meadows Center before and after taxes, additional assumptions regarding the number of operating periods and the appreciation rate on the property value must be made. We have assumed that a sale will occur five years after construction.

Exhibit 16–10 summarizes estimates of before-tax cash flow (*BTCF*) during the development and operating periods, based on information contained in Exhibits 16–8 and 16–9. The before-tax estimate for *NPV* comprises all negative cash flows consisting of equity requirements at closing (land acquisition and loan fees), cash equity needed during development for costs not financed (indirect overhead), and cash requirements needed during year 2, or the lease-up phase. Positive cash flows are based on operations from years 3 through 6 plus cash flow from the sale of the project in year 6 (all figures are rounded).

Exhibit 16–11 contains estimates of before-tax cash flow when Rolling Meadows Center reevaluates its investment plans and instead of owning and operating, it decides to sell to Mony Mutual Realty Advisors, which acquires projects and manages them on behalf of pension fund sponsors. We see that after paying selling expenses and repaying the mortgage loan balance to Citadel, Southfork will have \$7,104,160 in cash before taxes (*BTCFs*). The sale price for the project, \$16,035,003, is based on the initial total project cost, \$11,982,287 (Exhibit 16–8), compounded at an appreciation rate of 6 percent per year for five years.

From Exhibit 16–10, we can calculate an estimate for *NPV* before taxes based on all before-tax cash flows expected to occur from years 1 to 6, discounted at a required before-tax rate of 21 percent. This results in a positive *NPV* of \$38,884. This 21 percent required rate of return represents a 9 percent risk premium over the mortgage interest rate that Southfork management believes would be a satisfactory return on its equity after recovery of all project costs, given the risk of the Rolling Meadows project.

The *after-tax internal rate of return* for Southfork is also presented in Exhibit 16–10. To arrive at net cash flow after tax during development and in each operating year, we need additional information to take income taxes into account.

Exhibit 16–12 provides the information about depreciation and amortization of various project costs that we need to estimate taxable income. Part A in Exhibit 16–12 contains a list of costs that must be capitalized as part of the improvement and depreciated.



EXHIBIT 16-10 Profitability Analysis for Rolling Meadows Center

www.mhhe.com/bf16e

	Before-Tax Cash Flow						
	Year						
	0	1	2	3	4	5	6
Equity	\$-2,950,071	\$-30,800					
BTCF—operations			\$-380,361	\$461,971	\$557,438	\$658,614	\$765,837
BTCF—sale							7,104,160
Total BTCF	\$-2,950,071	\$-30,800	\$-380,361	\$461,971	\$557,438	\$658,614	\$7,869,997
BTIRR	21.33%						
BTNPV @ 21%	\$ 38,884						
	Taxable Income						
	Year						
	0	1	2	3	4	5	6
Net operating income			\$ 757,300	\$1,599,632	\$1,695,099	\$1,796,275	\$1,903,498
Less:							
Interest			1,076,900	1,069,194	1,060,511	1,050,726	1,039,701
Depreciation:							
Capital improvements			256,769	256,769	256,769	256,769	256,769
Tenant improvements			256,769	183,406	131,005	93,575	66,839
Amortization:							
Leasing commissions			9,060	9,060	9,060	9,060	9,060
Construction loan fees		\$180,028					
Permanent loan fees			27,004	27,004	27,004	27,004	27,004
Taxable income		\$-180,028	\$-869,202	\$ 54,199	\$ 210,750	\$ 359,141	\$ 504,227
Tax @ 28%		\$ -50,408	\$-243,377	\$ 15,176	\$ 59,010	\$ 100,559	\$ 141,184
	After-Tax Cash Flows						
	0	1	2	3	4	5	6
Total BTCF	\$-2,950,071	\$-30,800	\$-380,361	\$461,971	\$557,438	\$658,614	\$7,869,997
Less: Ord. Tax	0	\$-50,408	\$-243,377	15,176	59,010	100,559	141,184
Cap. gain tax							1,710,185*
ATCF	\$-2,950,071	\$ 19,608	\$-136,984	\$446,795	\$498,428	\$558,055	\$6,018,729
ATIRR	17.79%						
ATNPV @ 17%	\$ 96,077						

*See Exhibit 16-11.

Of total depreciable costs, we see in part B that 90 percent are capital improvements and, therefore, subject to depreciation on a straight-line basis over 31.5 years.¹⁴ Southfork estimates 10 percent of these costs to be tenant improvements, which are categorized as personal rather than real property. This category of improvement may be depreciated on a double-declining basis over seven years.¹⁵ Part C contains a description of project

¹⁴ See Chapter 11 for an explanation of depreciation methods. The depreciable life of 31.5 years used in this example is not necessarily representative of the current tax law. It is for purposes of illustration only.

¹⁵ An explanation of double-declining-balance depreciation may be found in introductory accounting texts. Switching to straight-line is also allowed and carried out in the analysis here.

EXHIBIT 16-11
Sale of Rolling
Meadows Center

Before-Tax Cash Flow	
Sale price	\$16,035,003
Less:	
Selling expenses	320,700
Mortgage balance	8,610,143
Before-tax cash flow on the sale	<u>\$ 7,104,160</u>
Gain in Year of Sale	
Sale price	\$16,035,003
Less:	
Selling expenses	320,700
Adjusted basis	9,606,498
Total gain on the sale	<u>\$ 6,107,804</u>
After-Tax Cash Flow	
Before-tax cash flow on the sale	\$ 7,104,160
Less: Tax on gain @ 28%	1,710,185
After-tax cash flow on the sale	<u>\$ 5,393,974</u>

soft costs that may be amortized. Because we assume two loans are being used to fund the project, we amortize loan fees over the respective terms of each loan.¹⁶ Finally, we capitalize leasing commissions and write them off over the average of lease terms for the project.

We also need after-tax cash flow in the year of sale (*ATCFs*) to complete the computation of the after-tax *IRR*. From Exhibit 16-11, tax in the year of sale (\$1,710,185) is the difference between the estimated net selling price less the adjusted basis times the 28 percent tax rate. As noted in Chapter 11, capital gains might be taxed at a lower rate than ordinary income. In this example, we assume that the same tax rate is used for ordinary income and capital gains. The adjusted basis is computed as the cost of land plus all improvements, or \$11,982,287, less the sum of all depreciation and amortization taken over the seven-year period.¹⁷ The adjusted basis, or cost to be recovered from the sale of the asset prior to computing the tax on the gain, is \$9,606,498. We can then estimate the after-tax cash flow to be \$5,393,974.

We can solve for the *ATIRR* shown in Exhibit 16-10 by setting the equity requirements at closing equal to *ATCF* in each year and in the year of sale and solving for the rate of interest that makes the after-tax *NPV* equal to zero. Note that although *BTCF* is negative in year 1, the after-tax cash flow is positive during that year because of the tax deductibility of loan fees. Those deductions result in a net loss, or an offset against any other active

¹⁶ The permanent loan fees are assumed to be paid when the commitment is obtained. However, amortization is assumed not to begin until the loan is closed at the beginning of the third year.

¹⁷ In years prior to the 1986 Tax Reform Act, tax rates on capital gains and on ordinary income were different. Further, the tax treatment of construction period interest and property taxes and certain other fees also differed. Because of these differences, interest, taxes, and fees were capitalized from the improvement, and the unamortized balance in the year of sale was either deducted as an ordinary expense or added to the undepreciated basis. Stay informed about real estate taxation, particularly when analyzing project development, because the tax treatment of various cost categories changes frequently.

EXHIBIT 16-12
Depreciation and
Amortization
Schedule for Rolling
Meadows Center

A. Depreciable costs:			
Site improvements (on-/off-)		\$ 850,000	
Hard costs		7,055,500	
Soft costs:			
Architect engineering	\$ 147,000		
Fees and permits	24,300		
Legal fees	26,900		
Construction interest	692,416		
Direct overhead	160,000		
Indirect overhead	30,800		
Total soft costs		\$ 1,081,416	
Total depreciable costs		\$ 8,986,916	
B. Depreciation schedule:			
Capital improvements (90% of total)		\$ 8,088,225	31.5 years
Tenant improvements (10% of total)		898,692	7 years
		\$ 8,986,916	
C. Amortization schedule:			
Construction loan fees		\$ 180,028	1 year
Permanent loan fees		270,042	10 years
Leasing commissions		45,300	5 years
Total depreciable/amortized costs		9,482,287	
Add: Land		2,500,000	
Total project costs		\$11,982,287	
Adjusted Basis at the End of Year 6			
		Less: Accumulated	
Item	Total Cost	Depreciation/Amortization	Adjusted Basis
Land	\$ 2,500,000	\$ 0	\$2,500,000
Capital improvements	8,088,225	1,283,845	6,804,379
Tenant improvements	898,692	731,594	167,098
Permanent loan fees	270,042	135,021	135,021
Leasing commissions	45,300	45,300	0
Construction loan fees	180,028	180,028	0
Total	\$11,982,287	\$ 2,386,928	\$9,606,498

income earned by Southfork during that year. Hence, they *reduce* taxes, *save* cash, and offset negative *BTCF*. Taxes are calculated by assuming a tax rate of 28 percent,¹⁸ and after-tax cash flows are determined and used to determine the *ATIRR*, which is 17.79 percent for Rolling Meadows. Note that this return is *not* equal to the *BTIRR* (shown in Exhibit 16-10)

¹⁸ We assume that Southfork is a sole proprietorship or a partnership whose owners are taxed at ordinary rates. We also assume that Southfork's owners have other passive income that they can use to offset the passive losses produced by this project (see Chapter 11 for a discussion of passive income).

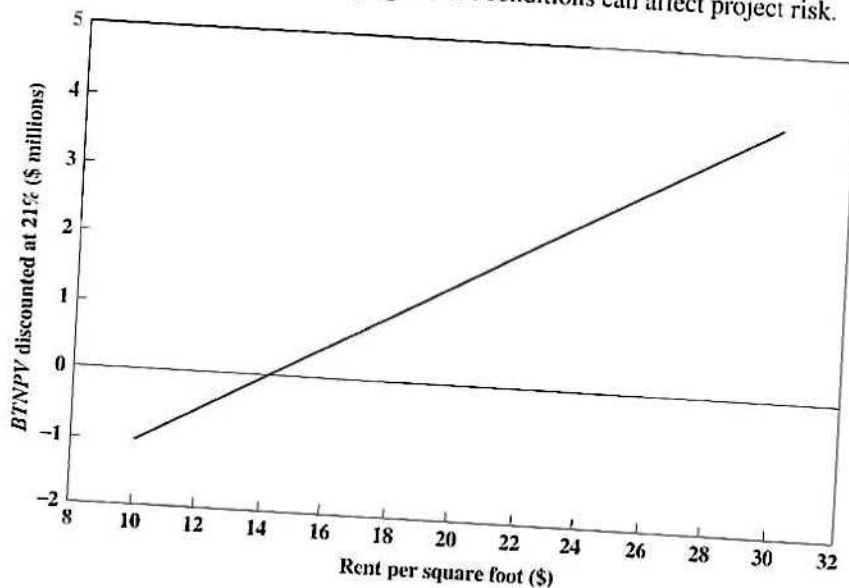
times 1 minus tax rate, or 21.33 percent ($1 - .28 = 15.36\%$), because of the higher rates allowable for amortization of tenant improvements and fees (Exhibit 16-12) relative to the 31.5 year straight-line depreciation allowed for real property. Using an after-tax discount rate of 17 percent, we find that the after-tax *NPV* (*ATNPV*) is \$96,077.

Sensitivity Analysis, Risk, and Feasibility Analysis

Based on the preceding analysis, we have concluded that if Southfork is satisfied that a 21 percent before-tax rate of return on equity is adequate to undertake the Rolling Meadows Center development, it will earn a positive *NPV*. This implies that the \$2.5 million land acquisition price would be warranted, given estimates of construction costs, market rents, expenses, and the appreciation rate in property value. An interesting question that could be raised at this point is, "Suppose that market rents were estimated to be \$12 per square foot instead of \$15 and all other assumptions remained constant (quantity of space, construction costs, interest rates, appreciation rates, and operating expenses). Would the project still be feasible—would it cover all costs and provide the developer with a competitive return on equity?"

To consider this question, refer to Exhibit 16-13. This diagram represents the relationship between *BTNPV* (vertical axis) and market rents per square foot of leasable area (horizontal axis). Note that at the average rent of \$15 per square foot assumed in our analysis, the *BTNPV* is slightly above zero (the discount rate is held constant at 21%). If, however, the market rent averaged \$12 per square foot and all other assumptions remained the same, it is clear that the *NPV* would be negative. In that case, Southfork would not be interested in pursuing the development. An even more critical aspect of this analysis becomes clear if, after both loan commitments were made, construction went forward on the project and market rents *then* fell from \$15 to \$12 per square foot as the lease-up phase was under way. In this event, Southfork would be facing a negative *NPV* and would be committed to the development. If it was not able to produce more equity or to find additional investors to provide equity at that point, it would not be able to meet project expenses and debt service. At that point, the interim lender would be faced with the prospect that the permanent lender may not be compelled to honor its take-out commitment because the developer would not be able to meet rental requirements. The interim lender would have to negotiate the interim loan terms with the developer (sometimes referred to as a *workout*), or possibly foreclose. You can now begin to see how changing market conditions can affect project risk.

EXHIBIT 16-13
BTNPV of Rolling Meadows Center and Rents



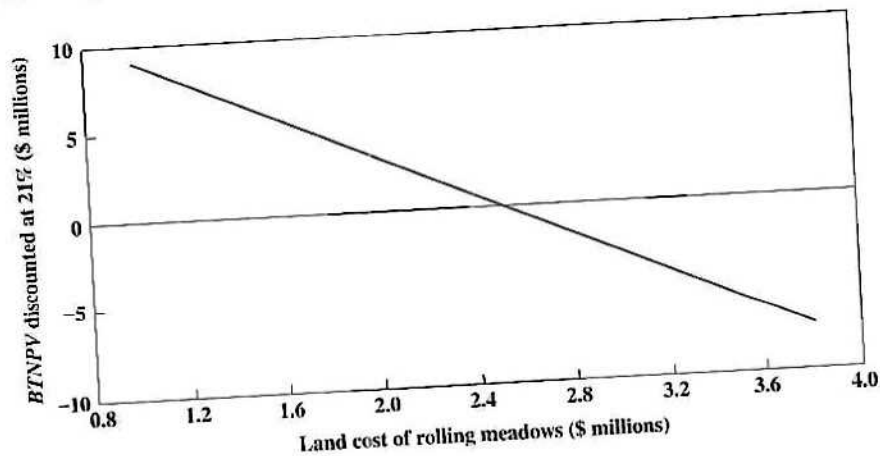
Web App

Construction (C&D) loans and ADLs are available from a variety of lenders, including most commercial banks. There are numerous websites with information available from lenders offering construction loans. Use a search

engine to find a site with information on current rates for construction loans. Summarize what the rate is and as much information as you can find about how the loan is structured.

Another important consideration is apparent in Exhibit 16–14, where *BTNPV* is related to land cost (horizontal axis). Recall that we estimated a slightly positive *NPV* when we assumed that the land was acquired at \$2.5 million. If Southfork was too optimistic and paid \$3 million for the land, we can see from the diagram that the *NPV* would be negative (again, discounting at 21% and holding all other variables constant). On the other hand, if the land could be acquired for less than \$2.5 million, the *NPV* would become more favorable. The value of this *sensitivity analysis* should be obvious at this point.¹⁹ This analysis is also referred to as **feasibility analysis**, or a determination of whether a project is commercially feasible at prevailing market rents, land prices, and construction and financing costs.

EXHIBIT 16–14
BTNPV of Rolling
Meadows Center and
Land Cost



Conclusion

In this chapter, we have focused on financing development of income-producing real estate such as apartment complexes, office buildings, warehouses, and shopping centers. Development projects include many risks in addition to those we have discussed in previous chapters for existing projects. We have seen that developers of such projects face changing conditions in the national and local economies, competitive pressures from other developments, and changes in locational preferences of tenants. All of these variables influence the profitability of developing and operating an income-producing property. When combined, all of these forces affect the developer's ability to acquire land, build improvements, lease space to tenants, and earn sufficient revenues to cover operating expenses and repay construction and/or permanent mortgage loans. In this chapter, we also illustrated the mechanics of construction loans, which differ considerably from permanent loans. The reasons for such differences are because loan draws are made for developers to pay for construction costs as needed during the construction period. The next chapter explores land development projects and extends the concepts of the present chapter to development and financing land for subdivisions.

¹⁹ The same analysis may be carried out by changing other variables, such as construction costs, interest rates, or operating expenses one at a time to assess the impact on before-tax *NPV*.

Key Terms

acquisition and development loan (ADL), 534	hard costs, 534	standby loan, 539
build to suit facilities, 531	holdbacks, 546	speculative, <i>open-ended construction lending</i> , 535
construction and development loan, 534	monthly draw method, 540	stabilization period, 537
feasibility analysis, 556	percentage rent, 548	takeout commitment, 539
gross ups, 549	permanent financing, 546	
	soft costs, 534	

Useful Websites

- www.uli.org—The mission of the Urban Land Institute is to provide responsible leadership in the use of land in order to enhance the total environment. This site also provides current issues for financial trends in the industry.
- www.bizloan.org—Good resource for information about different types of loans used for project development. Includes glossary of terms.
- www.census.gov—U.S. Census Bureau website.
- www.icsc.org—International Council of Shopping Centers website.
- www.economy.com—Economy.com is a provider of economic data.
- www.bls.gov—U.S. Department of Labor website.
- www.bea.gov—U.S. Department of Commerce—Bureau of Economic Development website.
- www.claritas.com—Nielsen Claritas provides demographic and enhanced census data.
- www.axiometrics.com—Axiometrics is a research firm providing fundamental real estate research for the apartment sector with an emphasis on the performance of portfolios owned by the publicly traded apartment REITs.
- www.econdata.net—This site has around 1,000 links to socioeconomic data sources, arranged by subject and provider, pointers to the Web's premiere data collections, and its own list of the 10 best sites for finding regional economic data.
- www.economy.com/freelunch—FreeLunch.com is the Web's best source of free economic data. Users can quickly and easily chart and download economic data. Moody's Economy.com data services teams in Asia, Europe, and the United States update FreeLunch.com's economic data as they are released by the primary source.
- www.finance.yahoo.com—Yahoo Finance provides the subscriber with up-to-date information on finance. The site also features information centers in mutual funds, bill pay, banking, loans, insurance, retirement planning, and taxes.

Questions

1. What are the sources of risk associated with project development?
2. What are two common development strategies that many developers use?
3. What contingencies are commonly found in loan commitments? Why are they used? What happens if they are not met by the developer?
4. What is a *standby commitment*? When and why is it used?
5. A presale agreement is said to be equivalent to take-out funding that may be used to repay the construction loan. What will the construction lender be concerned about if the developer plans to use such an agreement?
6. What is the major concern construction lenders express about the income approach to estimating value for a proposed development project? Why do they prefer to use the cost approach when possible? In the latter case, if the developer has owned the land for five years prior to development, would the cost approach be more effective? Why or why not?
7. What do we mean by percentage rents and *overage* in a retail lease agreement? How might these payments be calculated?
8. What are *gross ups* in determining tenant reimbursements for operating expenses? Why are they used?
9. What is *sensitivity analysis*? How might it be used in real estate development?

10. It is sometimes said that land represents a "residual" value. This statement reflects the fact that improvement costs do not vary materially from one location to another, whereas rents vary considerably. Hence, land values reflect changes in rents (both up and down) from location to location. Do you agree or disagree?
- 11 What are holdbacks in construction lending? Why is the practice of holdbacks used?

Problems

1. Review Concept Box 16.2. The investor-developer would not be comfortable with a 7.8 percent return on cost because the margin for error is too risky. If construction costs are higher or rents are lower than anticipated, the project may not be feasible.
- a. Based on the fact that the project appears to have 9,360 square feet of surface area in excess of zoning requirements, the developer could make an argument to the planning department for an additional 10 units, 250 units in total, or 25 units per acre. How would this affect financial feasibility? What could be included in such an argument? Why would a public regulatory institution be interested in increasing density to 25 units per acre? Why not?
- b. Instead of (a), suppose the developer could build a 240-unit luxury apartment complex with a cost of \$83,000 per unit. What would such a project have to rent for (per square foot) to make an 8 percent return on total cost? What risk factors would the developer have to consider?

The CEO of Kuchner Development Co. has just come from a meeting with his marketing staff where he was given the latest market study of a proposed new shopping center, Parker Road Plaza. The study calls for a construction phase of one year and an operation phase of five years. The property is to be sold at the end of the fifth year of operation.

Part I. Construction Phase:

The marketing staff has chosen a 12-acre site for the project that they believe they can acquire for \$2.25 million. The initial studies indicate that this shopping center will support a floor-to-area ratio of 36.35 percent and a 92.11 percent leasable area ratio. [This means that the gross building area (GBA) will be 190,000 sq. ft., and the gross leasable area (GLA) will be 175,000 sq. ft.]

The head of Kuchner's construction division assures the CEO that construction can keep hard costs to \$54 per square foot (GBA) and soft costs (excluding interest carry and all loan fees) to \$4.50 per square foot (GBA). The division has decided to subcontract all of the site improvements at a total cost of \$750,000.

The Shawmut Bank has agreed to provide interim financing for the project. The bank will finance all of the construction costs and site improvements at an annual rate of 13 percent plus a loan commitment fee of two points. The construction division estimates that 60 percent of the total direct cost will be taken down evenly during the first six months of the construction phase. Kuchner expects to obtain permanent financing from the Acme Insurance Co. at an interest rate of 12 percent for 20 years with a 2.5 percent prepaid loan fee and a 10-year call. Kuchner is expected to make monthly loan payments.

- a. What will be the total project cost for Parker Road Plaza (excluding loan commitment fees and interest carry)? What will be the total direct costs?
- b. What will be the interest carry for the Parker Road Plaza project? What will be the total loan amount that Kuchner must borrow (including interest carry)? What will be the yield to the lender on this construction loan?
- c. What is the total project cost and how much equity must be put into the project each year during the construction phase? (Kuchner will fund both loan commitment fees from project equity.)

Part II. Operations and Final Sale Phase:

Kuchner estimates that it can lease Parker Road Plaza for \$18.50 per square foot (GLA) base rent with a 3 percent overage on gross sales in excess of \$200 per square foot (GLA). The

- company expects rents to increase by 5 percent per year during the lease period and tenant reimbursements to run \$8 per square foot (*GLA*) and to increase at the same rate as rents. Kuchner expects to have the shopping center 70 percent leased during the first year of operation. After that, vacancies should average about 5 percent per year. The vacancy losses should be calculated on the entire gross potential income, which includes minimum rents, percentage rents, and tenant reimbursements. Sales, which are expected to average \$210 per square foot (*GLA*) for the first year of operation, should grow at 6 percent per year. The operating expenses are expected to average \$14 per square foot of *GLA* for the first year and will increase at the same rate as the rents. Kuchner will collect an additional 5 percent of *EGI* as an annual management fee. The final sales price is expected to be \$18.4 million and Kuchner will incur sales expenses of 2 percent. Two schedules provide necessary information about this phase of the project: (1) the gross potential income of Parker Road Plaza for the five-year operation period and (2) the schedule of amortization and depreciation expenses for the project.
- d. What cash flows would Kuchner Development Co. earn before and after taxes for Parker Road Plaza if it were operated for five years (assuming the marginal tax rate to be 28% for ordinary income and capital gains)? What cash flows will Kuchner realize before and after taxes from the sale of the project after five years?
- e. Assuming that Kuchner's before-tax required rate of return is 16 percent, should the company develop Parker Road Plaza? Justify your answer based on *BTNPV* and *BTIRR*.

Pro Forma Operating Statement—Parker Road Plaza

Cash Flows (End of Year)	2	3	4	5	6
Income					
Minimum rent	\$3,237,500	\$3,399,375	\$3,569,344	\$3,747,811	\$3,935,201
Overage (% of gross sales)	52,500	118,650	188,769	263,095	341,881
Tenant reimbursements (per <i>GLA</i>)	1,400,000	1,470,000	1,543,500	1,620,675	1,701,709
Potential gross income	\$4,690,000	\$4,988,025	\$5,301,613	\$5,631,581	\$5,978,791

Item	Amortization Period
Construction loan fees	1 year
Permanent loan fees	10 years

Item	Depreciation Period
Capital improvements (90% of total)	31.5 years S/L
Tenant improvements (10% of total)	7 years DDB

As a financial advisor for the Spain Development Co., you have been given the construction and marketing studies for the proposed Timbercreek office project. Several potential sites have been selected, but a final decision has not been made. Your manager needs to know how much she can afford to pay for the land and still manage to return 16 percent on the entire project over its lifetime.

The strategic plan calls for a construction phase of one year and an operation phase of five years, after which time the property will be sold. The marketing staff says that a 1.3-acre site will be adequate because the initial studies indicate that this site will support an office building with a gross leasable area (*GLA*) of 26,520 square feet. The gross building area (*GBA*) will be 31,200 square feet, giving a leasable ratio of 85 percent. The marketing staff further assures you that the space can be rented for \$19 per square foot. The head of the construction division maintains that all direct costs (excluding interest carry and all loan fees) will be \$2.4 million.

The First Street Bank will provide the construction loan for the project. The bank will finance all of the construction costs, site improvements, and interest carry at an annual rate of 13 percent plus a loan origination fee of 1.5 points. The construction division estimates that the direct cost draws will be taken down in six equal amounts commencing with the first month after close. The permanent financing for the project will come at the end of the first year from the Reliable Co. at an interest rate of 11.5 percent with a 4 percent prepaid loan fee. The loan has an eight-year term and is to be paid back monthly over a 25-year amortization schedule. No financing fees will be included in either loan amount. Spain will fund acquisition of the land with its own equity.

Spain expects tenant reimbursements for the project to be \$3.25 per square foot and the office building to be 75 percent leased during the first year of operation. After that, vacancies should average about 5 percent of GPI per year. Rents, tenant reimbursement, and operating expenses are expected to increase by 3 percent per year during the lease period. The operating expenses are expected to be \$9.50 per square foot. The final sales price is based on the *NOI* in the sixth year of the project (the fifth year of operation) capitalized at 9.5 percent. The project will incur sales expenses of 4 percent. Spain is concerned that it may not be able to afford to pay for the land and still earn 16 percent (before taxes) on its equity (remember that the land acquisition cost must be paid from Spain's equity).

To consider project feasibility,

- a. Estimate the construction draw schedule, interest carry, and total loan amount for improvements. Determine total project cost (including fees) less financing and the equity needed to fund improvements.
 - b. Estimate cash flows from operations and eventual sale.
 - c. Establish whether a positive or negative *NPV* exists by discounting equity cash inflows and outflows in (b).
 - d. What does the *NPV* mean in this case? If the asking price of the land were \$195,000, would this project be feasible?
4. **Excel.** Refer to the "Ch16 Const" tab in the Excel Workbook provided on the website.
- a. What is the yield to the lender and the investor's after-tax *IRR* if 90 percent of the loan must be drawn during the first four months and 10 percent during the last eight months?
 - b. Repeat (a) assuming that 60 percent of the loan is drawn the first four months and 40 percent the last eight months.